HR001117S0011 Amendment 1 – Swarm Sprints OFFensive Swarm-Enabled Tactics (OFFSET) Frequently Asked Questions

As of October 31, 2017

IN THE EVENT OF ANY INCONSISTENCY BETWEEN THE ANSWERS PROVIDED HEREIN AND THE BAA, THE BAA SHALL TAKE PRECEDENCE

- Q1. The solicitation for the first Sprint (HR001117S0011-Amendment-01) emphasizes the development of swarm "tactics" to be validated first in a simulation environment. Are proposers expected to provide, as part of the Sprint 1 base effort, complete implementations for all 'primitives' and 'algorithms' required to implement the proposed tactics, or may the base-phase simulations assume competent implementation of these lower-level skills by the unmanned platforms? For example, would it be acceptable for a simulated platform to provide a "doorway detection" function, which provides a detection output event (with some probability of detection and false alarm), but does not model the specific sensor data (imagery) and signal processing (object detection) associated with that function?
- A1. Yes, the tactics implemented in this Swarm Tactics Sprint should include the implementations of the underlying primitives and algorithms needed to achieve the tactic. Proposals are encouraged to leverage existing and/or open-source algorithms and libraries. In the example provided, the imagery and object detection capabilities should be included as components of the tactic. However, in the event that a synthetic technology (i.e., notional technology that does not yet exist) is a critical component of the tactic, the synthetic technology can be modeled in a reasonable manner that may not include all of the underlying algorithms. Note that synthetic technologies are not the focus of this Swarm Sprint, so any reliance on synthetic elements should be compelling and justified in the proposal.
- Q2. If Sprint 1 proposers are expected to provide full-stack implementations of all 'primitives' and 'algorithms,' is it accurate to assume that the proposer-supplied simulation for base-phase evaluation must therefore be of sufficient fidelity to provide all required sensor base data to stimulate the signal and data processing algorithms and related primitives?
- A2. Yes, the proposer-supplied simulation should include models of any required sensors to a reasonable level of fidelity. Proposals should include a discussion of the sensor models and justification for their level of fidelity.
- Q3. Are proposals from university teams with a single PI and postdoc/students accepted?
- A3. Yes, as long as the proposals meet the requirements listed in the BAA.

- Q4. The document mentions that duration of the sprint is 6-9 months, which would be too short for our planned work. Would it be possible to have the duration of the sprint as one year (including integration)?
- A4. We are unable to extend the sprints for longer than the 6-9 month time frame due to the nature of the experiments.
- Q5. What is the start date for the next sprint cycle?
- A5. DARPA anticipates sprint topics to be released at regular intervals throughout the program. The swarm sprints will likely focus on one of five thrust areas: swarm tactics, swarm autonomy, human-swarm teaming, virtual environment, and physical testbed. The dates have not been determined at this point.

As of November 9, 2017

- Q6. As an FFRDC are we eligible to propose? If so, are there any special restrictions or contract vehicles that would apply to us?
- A6. The "Eligible Applicants" section is unchanged by the amendment; please refer to the initial posting of the BAA #HR001117S0011. FFRDCs are eligible to propose. Additional information and instructions are located in the initial BAA.
- Q7. Could you please confirm foreign companies can apply and that the application forms are the ones; listed under Amendment 1?
- A7. Yes, foreign participation is welcome. There are required forms. Please see the BAA and Amendment for submission requirements.
- **Q8.** Is the deadline for submission still Nov 29?
- A8. Yes
- Q9. Is the question period still open?
- A9. Yes, we will continue to accept questions and post on a rolling basis to the DARPA Opportunities page.
- Q10. Is there a website for proposers? Was there a Proposers Day?
- A10. There is not a website for Proposers Day. There was a Proposers Day in January 2017 for the OFFSET Swarm Systems Integrators and the start of the Program. Information from that Proposers Day can be found on the DARPA Opportunities page. The BAA is located here https://www.fbo.gov/spg/ODA/DARPA/CMO/HR001117S0011/listing.html. Proposers Day for OFFSET Swarm Sprinters (relevant to the current BAA Amendment)

was Virtual and can be found on the Opportunities page and at https://www.youtube.com/watch?v=c7KPBHPEMM0

- Q11. Section IV.B.1 states that the proposal should be delivered in two volumes, Volume I

 Technical and Management Proposal and Volume II Cost Proposal. Should

 Attachment 3-Summary Slide (PowerPoint) and Attachment 4-Administrative and

 National Policy (Word) be converted to PDF and inserted as part of Volume 1?
- A11. Attachment 3 and Attachment 4 can be submitted as separate documents when submitting the proposal.